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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,719	12/21/2001	Isabelle Rey-Fabret	612.40914X00	5927
20457	7590	02/23/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			PHAN, THAI Q	
			ART UNIT	PAPER NUMBER
			2128	5
DATE MAILED: 02/23/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

10/024,719

Applicant(s)

REY-FABRET ET AL.

Examiner

Thai Phan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with th correspondenc address --

## Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachm nt(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This Office Action is in response to patent application S/N: 10/024,719. Claims 1-4 are now pending.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

The drawing filed on 12/21/2001 is acceptable for examination.

#### ***Information Disclosure Statement***

The information disclosure statement filed 12/21/2001 has been considered.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Jorgensen et al., US patent no. 5,649,064.

As per claim 1, Jorgensen discloses a system and method for modeling flow activities in a dynamic system such as hydrodynamic system with feature limitations very identical to the claimed invention. According to Jorgensen, the simulation method includes steps of determining the neural network so as to adjust to values of a learning base with predetermined tables connecting values obtained for output data from the

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output to corresponding values of input data to the inputs and wherein the learning base imposed operating conditions and the determined neural networks are adjusted to the imposed operating conditions (Figs, 4-6, col. 2, lines 49-57, col. 4, lines 7-20, cols. 5-9, for exemplary).

As per claim 2, Jorgensen anticipates hydrodynamic quantities as claimed (col. 5, lines 10-22, for example).

As per claim 3, Jorgensen anticipates flow dynamic and flow quantities which are in thermodynamic application, hydrodynamic applications, etc. for heat flow, fluid flow analysis (col. 5, line 40 to col. 7, line 22, for example) as claimed.

As per claim 4, Jorgensen anticipates learning base modules for training and selecting the physical quantities best suited to the model, variation ranges for the parameters and quantities, and the neural network best suited for the learning base (col. 5, line 47 to col. 9, line 50).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent no. 4,874,963, issued to Alspector, Joshua, on Oct. 1989
2. US patent no. 5,924,086, issued to Mathur et al., on July 1999
3. US patent no. 6,243,694 B1, issued to Keeler et al., on June 2001
4. US patent no. 6,411,944 B1, issued to Ulyanov, Sergei, on June 2002

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 703-

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305-3812. Any information regarding to the status or prior communications should be directed to the Group receptionist at 703-305-3900.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Phan  
Feb. 20, 2004

*Thai Phan*  
Thai Phan  
Patent Examiner  
AU: 2128